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## **Social Capital in Situations of Conflict: A Case Study from Côte d'Ivoire (Pp. 158-180)**

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### **Abstract**

*Over the last few years, many studies have emphasized the importance of social capital in economic progress and development of societies. In particular, sustainable development requires more cohesive and peaceful societies. This study attempts to assess how the armed conflict in Côte d'Ivoire has weakened the country's social fabric and how to restore it. Cross-sectional data obtained from a survey are used to address this issue. We use measures of trust and associational participation as proxies for social capital. The empirical findings reveal a renewed interest for associations. They also give support to the eroding trust between people. The loss of trust poses a true challenge in terms of reconciliation and of rebuilding social cohesion.*

**Key words:** Social Capital, Conflict, Trust, Associations.

### **Introduction**

Thanks to its relative economic prosperity, Côte d'Ivoire was for a long time one of Africa's most stable countries. For decades after its independence in

1960, the country enjoyed religious and ethnic harmony and showed remarkable political stability. All that changed on December 24, 1999, when rebels overthrew the government in the country's first military coup. Since that time, the political agenda has been dominated by political and social tensions. This situation has culminated on September 19, 2002 in a war which divided the country in two and escalated into the country's worst crisis. The south is under government control, and the north is held by the rebels. The conflict has added to an already bewildering pattern of population displacements. More than 1,300, 000 people have been forced to flee the fighting and over 2, 000 were killed. Today, although the fighting have officially ceased, the main players in the conflict have so far failed to find a political solution. The presidential election initially scheduled for October 2005 was postponed. The political upheaval deeply affected the economic outlook. In 2003 and 2004, real GDP recorded negative growth of respectively -1.6 percent and -1.7 percent (OECD, 2006). Whatever the government in place, it will have the priority goals of Disarmament, Demobilisation, and Reintegration. After implementing this program, the government will also have to consider as a priority the rebuilding of the country economic prosperity. However, this economic goal cannot be achieved without social reconciliation.

Indeed, besides traditional economic factors which determine the prosperity of a country, it is recognized today that factors related to the nature of the social bond play a decisive role: the diversity and the quality of the social fabric, the feeling of attachment of the citizens with certain values and norms such as cooperation, solidarity, and mutual trust. These elements received an increasing attention during these last years through the concept of social capital which conceptualizes these various aspects of the social bond as a form of capital.

Following Putnam (1993) and Coleman (1988), a growing body of research has examined the phenomenon of social capital in an attempt to define the concept and to describe how it may influence and improve the development process. Efforts have also been made to develop indicators for measuring social capital and to improve recommendations on how to encourage and support it. As mentioned by Colletta and Cullen (2002), few studies, however, have actually analyzed how social capital interacts with violent conflict, an important issue considering the rise in the frequency of civil conflicts in African countries and the importance of social capital for social

and economic development (Knack and Keefer, 1997; Grootaert, 1998; Collier and Hoeffler, 2000; Anyanwu, 2002).

What is the impact of the Ivorian conflict on social capital? Does the conflict divide population and undermine deeply social cohesion? What forms of social capital have emerged as result of the war? Do these forms of social capital contribute to reinforce national cohesion? Gaining a better understanding of these issues is relevant for policy-making purposes. Thus the main objective of this study is to assess how much the ivorian conflict has depleted the social capital. Using data obtained from a survey, we explore empirically the effect of the conflict on different indicators of social capital, such as the prevalence of trust among population and the membership in social organizations. We also examine the ways in which government can foster the socially cohesive relationships necessary for conflict prevention, reconciliation, reconstruction and development.

The remainder of the paper proceeds as follows. After a brief review of the literature on social capital relevant to its relationship with conflict and social cohesion, we describe the data used in the empirical section. We then present and analyze the results. The final section draws some conclusions and policy implications.

### **Conceptual Framework**

Social capital is the key theme of this paper. It is one of the social resources that are relevant for understanding society cohesiveness and community prosperity. The purpose of this section is twofold. First, we motivate the indicators of social capital used in the empirical section by exploring the definition of social capital. Second, we analyze its relationship with conflict and social cohesion.

During the last few years, economists have taken a growing interest in social capital. This concept is spreading in economic and social literature. The definition of social capital in this literature is not uniform. Many of definitions draw from Coleman (1988), who defines social capital as the relations among persons that enable them to cooperate in the pursuit of mutual objectives. Starting from this definition, some researchers have emphasized the role of informal microinstitutional features of communities or groups. Putnam (1993, p.167), who drew the concept from Coleman, defined

social capital as “those features of social organizations, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions” or as “features of social life – networks, norms and trust –that enable participants to act together more effectively to pursue shared objectives” (Putnam 1995a, p. 664). Putnam is concerned not only with the role of social capital in economic development but also with its role in forming democratic societies. Thus he equates social capital with the quality and intensity of individual membership in social and professional associations. An alternative definition is provided by Huysman and Wulf (2004), who wrote, “Social capital refers to network ties of goodwill, mutual support, shared language, shared norms, social trust, and a sense of mutual obligation that people can derive value from. It is understood as the glue that holds together social aggregates such as networks of personal relationships, communities, regions, or even whole nations” (p. 1). As it appears from these definitions, all use of the concept of social capital refers to social norms. Social norms provide a form of informal social control that obviates the necessity for more formal, institutionalized legal sanctions. They are generally unwritten but commonly understood formulas both for determining what patterns of behaviour are expected in a given social context and for defining what forms of behaviour are valued or socially approved (Onyx and Bullen, 2000).

A broader definition of social capital includes not only these microinstitutional features but also the rule and regulations of the marketplace, political institutions, and development actors, which have an impact on social capital environment facing actors at the local level. Collier (1998) disaggregates social capital into government and civil social capital. Government social capital refers to government institutions that influence people’s ability to cooperate for mutual benefit. The most commonly analyzed of these institutions are the enforceability of contracts, the rule of law, and the extent of civil liberties permitted by the state. Civil social capital refers to those forms of social interactions that are not directly dependent on government rule system. It encompasses common values, norms, informal networks, and associational memberships that affect the ability of individuals to work together to achieve common goals. Narayan (1999) emphasizes the importance of inclusion of the state in social capital analysis examining the relationship between state and society. She argues that analysis must be not only centred on civic engagement, characterized by inclusive ties that link different individuals and groups or communities, but also on the effectiveness

of the state. As definition of social capital, she writes that “Social capital is the rules, norms, obligations, reciprocity, and trust embedded in social relations, social structures, and society’s institutional arrangements which enables its members to achieve their individual and community objectives” (Narayan, 1999 p. 50). In other words, the vitality of community networks and civil society is largely the product of the political, legal and institutional environment. The capacity of social groups to act in their collective interest depends on the quality of the formal institutions under which they reside (Woolcock and Narayan, 2000). The World Bank (1998) uses a similar definition: social capital refers to the norms and networks that enable collective action. It refers to the institutions, relationships and norms that shape the quality and quantity of a society’s social interactions.

While those definitions share common elements, their exact meaning is imprecise and thus obtaining a single true measure of social capital is problematic. The difficulty lies on the fact that social capital comprises various social elements that promote individual and collective action. Nevertheless, empirical researchers have identified useful indicators based on two core elements of social capital: trust among community members and people’s participation in social organizations- that is in informal and formal associations and networks. As their names implies, these two indicators are proxies for various aspects of social capital. No single indicator can embrace the whole spectrum of social capital, but these indicators as a group provide information about various dimensions of the concept. Trust entails a willingness to take risks in a social context based on a sense of confidence that others will respond as expected and will act in mutually supportive way. It refers to the confidence that a partner will not exploit the vulnerabilities of the other (Gambetta, 1988). As described by Fukuyama (1995, p.153), “trust arises when a community shares a set of moral values in such a way as to create expectations of regular and honest behaviour”. Reciprocity, civic duty, and moral obligation are essential to a successful and stable society and are the behaviours that should emanate from a thriving civil society. Generalized trust is based on a set of ethical habits and reciprocal moral obligations internalized by members of a community. High trust societies can do with fewer regulations and coercive enforcement mechanisms. Putnam views memberships in horizontal associations as a source of trust and of social ties conducive to democracy and economic performance. People engage with others through a variety of lateral associations. The underlying idea is that social capital cannot be generated by individuals acting on their own in

isolation. It depends on a proclivity for sociability, a capacity to form new associations and to cooperate within the terms of reference they establish (Fukuyama, 1995). Several empirical studies have used these indicators and shown that social capital is linked to a variety of social and economic outcomes such as better health (House *et al.* 1988), lower crime rates (Lederman *et al.*, 2002), education (Coleman, 1988), more labor market options (Burt, 1997), human well-being and poverty alleviation (Collier, 1998; Narayan and Pritchett 1999), economic growth (Knack and Keefer, 1997; Zak and Knack, 2001; Helliwell and Putnam, 1995a) and government performance (Putnam 1993, 1995b; Easterly and Levine, 1997).

Gittell and Vidal (1998) have coined the terms ‘bonding’ and ‘bridging’ to describe the different levels of social capital in communities. According to them, bonding social capital is "the type that brings closer together people who already know each other well", and bridging social capital is "the type that brings together people or groups who previously did not know each other well" (p.15). In this sense, bonding social capital includes all resources that people can obtain from within-group ties, while bridging social capital refers to resources that people can gain from their ties with people from the outside (Adler and Kwon 2002). In a later work, Putnam (2000) has made the same distinction, defining ‘bridging social capital’ as bonds of connectedness that are formed across diverse social groups (civil rights movements and ecumenical religious organisations), whereas ‘bonding social capital’ cements only homogenous groups such as family members and close friends. The idea of bridging social capital is not new. Granovetter (1973) also suggests that weak ties were an important resource in making possible mobility opportunities. He coined the terms “strong” and “weak ties” to describe the various networks and their usefulness in job-seeking practices. Access to individuals outside one’s close circle provides access to non-redundant information, resulting in benefits such as employment connections. These loose connections are referred to as “weak ties”. Within social networks, the existence of gaps- i.e. the absence of direct links among all participants- between connected individuals can actually increase the efficiency of information flows within the larger network. Burt (2000) refers to these gaps in social networks as “structural holes”. The structural holes argument is that social capital is created by a network in which people can broker connections between otherwise disconnected segments. Networks operate more efficiently when structural holes exist, often by supporting the new information and ideas between sub-groups. Such a process allows

information to flow from one group in which it is common knowledge to another where it is new and may be more valuable. Thus, individuals with contact networks rich in structural holes are the individuals who know about, have a hand in, and exercise control over, more rewarding opportunities. Although relationships within and between communities and organizations are crucial for collective action and for social and economic change, Woolcock (2002) also stresses the need to foster relationships with formal institutions beyond the community, that he terms 'linking' social capital. He asserts that strong relationships with formal institutions are instrumental in that they allow groups to access resources, ideas, and information from institutions of power.

This distinction is useful in highlighting how social capital may not always be beneficial for society as a whole. It gives insight to policymakers to more effectively build a society where economic prosperity and social order are likely. When attempting to identify measures for policy and operational recommendations from our study, it is important to examine the relation of social capital to the cohesiveness of a society in order to better investigate how within-group and across-group ties are affected by conflict and the role social capital can play in a conflict-ridden environment. In a definition proposed by Berkman and Kawachi (2000), quoted in Colletta and Cullen (2002, p. 282), social cohesion shares common elements with social capital. It refers not only to the absence of latent conflict whether in the form of inequalities, or political or ethnic polarization, but also to the presence of strong social bonds measured by levels of trust and norms of reciprocity, and the abundance of associations that bridge social divisions. In Putnam's view, social capital is about social cohesion, the glue which holds a community together. Cohesive order requires trust based on social networks, solidarity and common aims and objectives (Forrest and Kearns 2001). Through strong social networks which link families, friends, neighbours, workmates, and acquaintances, a climate is created where people have a deeper sense of belonging, more trust and a greater willingness to assist others, including foreigners. These webs of relationships, especially when they link people from different backgrounds, are what hold a community together. The more bonding and bridging horizontal social capital link with vertical social capital, the more likely it will be that a society is cohesive and thus possesses the inclusive institutions necessary for managing conflicts. But when a society's social capital inheres mainly in primary social groups disconnected from one another, the more powerful groups attempt to dominate the state, to

the exclusion of others groups. Such societies are characterized by latent conflict (Narayan, 1999). In short, lack of bridging and linking networks in a multicultural society can be restrictive to social cohesion and economic development efforts (Woolcock, 2002).

Civil conflict weakens the social cohesion. It deepens social cleavages between communities, undermines interpersonal and communal group trust, and destroys norms and values that underlie cooperation and collective action for the common good. Civil conflict also transforms social capital in favour of bonding relationships. Different works have analyzed the connection between social relation and conflict experiences. Alesina and La Ferrara (2002) investigated the factors that can determine the propensity to trust. They found that trust can be reduced by a recent history of traumatic experiences. In a case study from Rwanda, Colletta and Cullen (2002) showed that the conflict negatively affected most manifestations of horizontal social capital, such as exchange, mutual assistance and trust. It also has affected vertical relationships between the communities. We will now examine the onslaught of the Ivorian conflict on social capital.

### **Data source and statistical analysis**

In this section, we first describe the data and measure on social capital used in the empirical analysis. And then, we present an empirical model to examine demographic determinants of social capital.

### **Data source and measures**

The data considered in this paper come from a survey conducted by ENSEA in June 2004. This survey took place two years after the conflict and was designed to study the impact of the conflict on households living conditions. Detailed demographic and economic information was collected in order to address this issue. The data were collected by administering a uniform questionnaire to heads of households. Another questionnaire was specially administered to household members who were displaced. On the other hand, the survey also attempted to assess the impact of the crisis on social capital. It provides the primary source for Côte d'Ivoire evidence on trust and social relations. The limited resources available did not make possible a sampling framework such that the study would be representative of the country at the national level. The survey was confined to Yopougon, one of the most cosmopolitan areas of the country. Yopougon is a district of the capital Abidjan which is located in the South of the country and was controlled by



the government. At the beginning of the conflict, many people migrated toward the South in particular to Abidjan. In 2003, Yopougon accounts for 25.28 percent of the total population of Abidjan, according to the National Institute of Statistic.

A total of 1847 households were selected and surveyed by face-to-face interviews. The sample was selected according to a two-stage sampling design. At the first stage of the design, Primary Sampling Units (PSU) were based on territorial divisions called "district of census". PSU were selected with probability proportional to size. The total of PSU selected at the first stage is of 20. At the second stage, households were randomly selected using an equal probability sampling. Because of missing values, the final basic sample contains 1 805 households. Although the survey cannot be considered representative in the strict sense of the term, it provides very useful information on the way in which the crisis has affected people living conditions and social relations. The data analysis is restricted to the heads of households and results might be quite different for a head of household than for the other members of the household.

The definitions and measures of social capital used in the survey focus on people's participation in social networks and trust. In line of the aforementioned empirical studies, trust and social participation are seen as dimensions of social capital. The survey asked respondents whether they participated in associations. The question we use to measure group membership reflects the propensity to participate in different types of associations. Associational membership included professional associations, mutuels, political associations, religions organizations, youth groups, sporting clubs and cultural activities. Selected respondents were asked about their current and retrospective membership in those organizations. The survey did not record the amount of time individually spent in association. For each association, however, respondents have indicated their degree of involvement following an ordered variable with four classes. Specifically, respondents may participate as leader, very active member, sometime active, or not active. The first two categories concern individuals who take on certain responsibilities as managers or committee members in associations.

Trust is an abstract concept that is difficult to measure empirically because it may mean different things to different people. The survey focused both on generalized trust and on the extent of trust that exists in the context of

associational participation. The generalized trust question focused on responses to the question: “Generally speaking, do you think that most people can be trusted?” Group trust index is then calculated as the percentage of respondents who agree with the statement that “most people can be trusted”. In order to assess change in trust level, respondents were also asked whether they think that trust between people has degraded, improved, or remained unchanged.

### **Empirical model**

We are interested in how different characteristics can explain respondent behaviour. Since the focus of this work is on explaining social capital behaviour, we rely mainly on propensity to trust and participation in social groups. To study these decisions, we use a bivariate probit model. This model allows for explicit correlation between the error terms of the two equations and it is usually expressed in terms of continuous latent variable representing propensity, utility or preferences. It can be described as follows. Consider an individual making two decisions as described by equations 1 and 2 below:

$$T_i^* = \beta_1 x_{1i} + e_{1i}, \quad T_i = 1 \quad \text{if } T_i^* > 0, \quad 0 \quad \text{otherwise} \quad (1)$$

$$A_i^* = \beta_2 x_{2i} + e_{2i}, \quad A_i = 1 \quad \text{if } A_i^* > 0, \quad 0 \quad \text{otherwise} \quad (2)$$

where equation (1) represents the propensity of single agents to trust and equation (2) represents the decision to participate in associations. Assume that  $e_{1i}$  and  $e_{2i}$  are normally distributed with means of zero and standard deviations of 1, and that  $\rho$  is the correlation between these two error terms. We do not observe  $T_i^*$  and  $A_i^*$ , only the signs, coded as above. The correlation coefficient  $\rho$  could be interpreted as estimates of the dispersion of the unobserved heterogeneity in the behaviours.

The rationale for using a bivariate probit model as opposed to estimating two separate equations is that the propensity to trust and the decision to engage in social organizations are undoubtedly linked, and ignoring *a priori* this mutual dependence can lead to biased parameter estimates (Green, 1997). For instance, an agent’s desire for enjoying relational good, which is presumably unobservable and therefore included in the error terms, might be correlated

with both the trust and the decision of whether to join groups. Putnam (1993) has emphasized the propensity of associations to generate trust, social ties and civiness among people: “the denser such networks in a community, the more likely that its citizens will be able to cooperate for mutual benefit” (Putnam 1993, p. 173). Joint estimation of trust and membership decisions explicitly takes into account this correlation.

The set of independent variables that might influence social capital includes sex, marital status, age, religion and occupational status (occupied/non-occupied). Education is also relevant. More educated individuals may be expected to be more trusting and socially embedded. The positive effect of education on trust and membership might occur because more educated people associate with other more educated people who are, for some reason, more trustworthy. Alternatively, education might create individual social capital by raising social skills or because high status increases the ability to reward and punish others (Glaeser and al. 2000). Also included are control dummies variables indicating the ethnic group of the respondent. These variables are included to control for possible cultural differentials in the involvement in social activities and trust behaviour. Côte d'Ivoire has more than 60 ethnic groups, usually classified into five principal divisions: the Akans (east and center, including Lagoon peoples of the southeast); the Krous (southwest); the Southern Mandés (west); the Northern Mandés (northwest) and the Gurs or Voltaiques (northeast). These five ethno-linguistic groupings are completed by the foreigners who come from other countries. We introduce a dummy variable labelled “change in the occupational status after the conflict” to control for work-related problems.

Finally, the model is estimated using the maximum likelihood method. The next section provides discussion on the empirical results.

## **Empirical Results**

This section presents the results of the empirical analysis. Before turning to the results of the bivariate probit model, we consider descriptive statistics regarding the two variables of interest.

## **Descriptive Statistics**

One of the most outstanding aspects of the crisis is the renewed interest of people for associations. Whereas 50.09 percent of surveyed reported taking

part in associations before the events of September 2002, the fraction of participants jumps to 63.8 percent two years later (table 1). The main aim of these regroupings is to develop solidarity between the members. They are also based on the expression of a will of collaboration and tightening the bonds between people sharing same culture and sometimes same political vision. To identify change in associational participation, Mc Nemar non parametric test was carried out. The reported *p-value* indicates that difference is significant, that is people more participate in associations after the conflict than before.

Compared to previous studies give us instructive information. On this point, it is important to recall that an investigation led in 1979 in Abidjan by Delpesch (1983) estimated at 70 percent the householders who participated in associations. In 2000, associational participation was estimated at about 52.61 percent for Abidjan (Keho, 2006). Thus, there is a substantial downward trend in associational participation from 1979 to 2002. Can one interpret this downward trend as a direct consequence of the long period of economic crisis or a fold around the nuclear family, or the demonstration of a will of individualization and independence with respect to the community?

One can observe a renewed interest for collective regroupings after 2002. Is it a sign of a great freedom or an expression of a democratic projection? It is difficult to give clear response to this question since the difference observed here might be driven by many factors independent from or correlated with conflict.

It is important to balance this vision of associations. Indeed, associations cannot be all accredited *a priori* of good values. Certain associations, in particular associations of development, which gather people from the same village, area or country, carry on their activities on spaces which are not likely to disturb political and social order. Conversely, when associations take the form of groups support to political parties, they become often time dangerous. Animated by a political and ideological fanaticism, they are carrying disorder, division, hatred and exclusion. In fact, the density of associative space is not most important, what counts for development is the configuration of this space. The preceding analytical framework shows that when associations form groups disconnected from one another, society is subject to latent conflict which can be expressed through a rebellion, a questioning of the social, economic and political order. The downside of

social capital is acknowledged by many authors (see Portes and Sensenbrenner 1993; Portes and Landolt (1996); Portes 1998; Fafchamps and Minten 1999; Colletta and Cullen 2002). Portes and Landolt (1996) and Portes (1998) outline the downside social capital as nepotism or exclusion of outsiders from certain occupations, or restrictions on individual freedoms and a downward levelling of norms. In Rwanda the political and economic elite used identity to mobilize and contort social capital in order to achieve their own ends (Colletta and Cullen, 2002).

We now examine the fields of engagement. The associational involvement is very clearly dominated by associations of village, area or country of origin, since they account for 39.5 percent of membership. The level of people belonging to political associations increased from 12 percent to 16 percent over the two periods. This visible change in associational participation and particularly in political commitment can be explained by the context. As the conflict was at its beginning, country and communities fell prey to hatred and violence. Then, external bridging ties were being supplanted by integrative bonding relationships. The nature and causes of the conflict were transforming and strengthening certain types of social capital, mainly more community-oriented bonds, integrative forms of social capital increases within communities fighting for survival and identity.

Table 2 compares the levels of social capital across different subpopulations. It paints an interesting picture of who is and who is not likely to participate in associations and to trust others. As this table evidences it, the level of associational participation is generally high across demographic groups. We can, however, notice substantial variation in responses by group. Thus, associational participation varies from 58.5 among women to 65.2 percent among men. Comparison across religious groups highlights some significant differences. Catholics are more likely to participate in associations. The lower level of social involvement is recorded among Muslims. The degree of involvement appears to vary positively with the level of education: the more people are educated the more they are likely to belong to associations. Regarding the ethnic group, associational participation is much higher among Akans and southern ethnics (Krous and Southern Mandés).

Trust question depicts a quite different pattern. Looking at table 3, we notice that people propensity to trust others is low: in the whole sample, only 20.2 percent of people reported that “most people can be trusted”. Protestants fall

in the group that has the highest score on trust, follow Catholics and Muslims. Others religious and no religious people are less likely to report that “most people can be trusted”. Only 13 and 15.4 percent, respectively, of others religious and non-religious people think that “most people can be trusted”. These scores are low compared with 23.7 percent within Protestants and 20.6 percent within Catholics.

Ivorians are less trusting than foreigners. While 28 percent of foreigners think that “most people can be trusted”, it is about less than 23 percent of Ivorians who say that they are trusting. The conflict has undermined trust within nationals and between nationals and foreigners. The asymmetric in the propensity to trust people can receive explanations with reference to the nature and causes of the conflict. In the initial months of the conflict, voices had risen to spread hate propaganda against political opposition members, northern Ivorians, and foreign communities coming from neighbouring countries, who were generally suspected to be supporting the northern-based rebel movement. They were harassed, assaulted, arbitrarily arrested, detained, and, in many instances, executed based on their real or imputed ethnic and political affiliation. Given the social and political deterioration, Southern Ivorians mistrusted northern Ivorians and foreigners.

Trust has not been totally destroyed. There are some people who are optimistic. According to the responses displayed in table 3 below, there are about 52 percent of respondents who still think that trust has unchanged. Conversely, about 41 percent of people perceive a substantial degradation in trust as result of conflict. Results exhibit a similar trend across groups.

Mean response rates by demographic groups confound many different effects in the data. We attempt now to identify these separate effects with bivariate probit regressions that estimate how different characteristics explain trust and membership.

### **Regression Results**

The following table presents bivariate probit estimates for our basic model. The first column displays estimates of the associational participation equation, the second column display estimates of the trust equation and the third column indicates the marginal effects. Personal characteristics are generally poor predictors of trust behaviour; however they seem to play significant roles in the decision to participate in associations.

Regarding the estimates, table 4 indicates that involvement in associations increases as respondents get older. That adults are more likely to take part in associational activities is certainly due to their occupational status. Those who are working are more likely to undertake associational activities through, for instance, professional associations. The number of persons in the household exerts a positive impact on membership. Thus, people in the large households are more likely to be involved in associations. Membership increases with the level of education, especially for people with graduate level of study. Well-educated people exhibit more associational involvement than others, because of their higher level of economic activity. This suggests that the conflict did not diminish the willingness of more educated people to work together. This finding also indicates that human capital and social capital are complementary. The ethnic dummies, on the other hand, appear to have significant effect on the probability of taking part in association but not on trust behaviour. Results suggest that religion, especially Catholicism and Protestantism, correlate with trust. Indeed, Catholics and Protestants seem to be more trusting. Education does not influence trust behaviour. In the context of Ivorian crisis, more educated people as well as those who are not tend to have similar judgement toward others. Overall, the estimates of the bivariate probit model are in line with previous descriptive statistics.

The ancillary parameter measuring the correlation of the residuals from the two equations indicates that the two equations are positively associated. An interpretation of this correlation between associational participation and trust refers to the positive impact of membership on the extent of personal relations. People who experience more social contacts will be more trusting. Another interpretation concerns the presence of unobserved variables that are source of heterogeneity.

Although our empirical analysis takes into consideration a number of demographic variables, there are still some individual characteristics that cannot be observed in the data collected and that may be significant predictors of respondent's behaviour. Those variables could be a feeling of concern about others or a capacity to manage interpersonal contacts. It is well acknowledged that associational membership such as friendship relations involve a certain mastering of social relations technology (Bell, 1991), and especially that of language (Héran, 1988). Personal experience of conflict and

the length of continuous stay in the current village/neighbourhood are also significant determinants of both participation and level of generalized trust.

### **Conclusion**

Over the last few years, many studies have emphasized that social capital is important to economic progress and the development of societies. Sustainable development requires more cohesive and peaceful societies. In this article we have attempted to examine how the situation of conflict in Côte d'Ivoire has impacted its social fabric. Our empirical analysis has made use of data from a survey for this purpose. We used measures of trust and people's participation in associations as proxies for social capital. The main results suggest what follows. First, our empirical analysis evidence substantial changes in social capital. The postconflict forms of structural social capital do not differ greatly from those that existed before the conflict. The findings reveal, however, an increase in associational commitment, especially in political associations and in those that gather people from same ethnic group or area. That is not an encouraging fact, since bridging ties and trust between people have been weakened. Moreover, about two individuals out of five perceive substantial degradation in trust as result of conflict. Second, human capital and associational membership are found to be complementary. This suggests that the conflict has not canceled the proclivity of people to work together. Conversely, education does not seem to have significant effect on trust behaviour. In the context of Ivorian crisis, more educated people as well as those who are not tend to have similar judgement toward others.

The findings have important policy implications for policy makers. The loss of trust between people poses an important challenge in terms of rebuilding national cohesion. The findings show that efforts to rebuild cohesive society in Côte d'Ivoire are needed. Despite the renewed interest for associations, social ties are not sufficiently inclusive to counterbalance hatred and suspicion generated by the war. The challenge is to promote social development by encouraging social relationships that cross ethnic and political affiliation. Of course, this does not deny that bonding is not important. It is also necessary to preserve bonding ties that serve as the foundation of societal life.

In fact, social capital is a double-edged sword with regard to conflict and development. Abundance of social capital is not necessarily good. Indeed,



social capital has the potential for strengthening social cohesion or spurring social fragmentation. Social capital is good for individuals as long as it provides mutual aid and protection in time of crisis. At country level, it is constructive if it is about bridging between groups. However, it becomes 'bad' for country as a whole when it is perverted to mobilize groups such as young people or women to instigate violence and undermine social cohesion. Social and economic policies should have to account for this downside of social capital.

In this context, inclusive state institutions and conflict management mechanisms need to be encouraged for strengthening social cohesion, managing diversity, preventing predatory behaviour and conflict, and sustaining peace and development. Signs of steps in this direction have already emerged since the creation of the ministries for reconciliation, for solidarity and victims of war. Recent decentralization might encourage people participation in community projects. Community-based development approaches are attempting to create the space for development of social capital that goes beyond the boundaries of family, ethnic group or political parties. Not only they reinforce cohesion within groups, they also link communities to the state. In addition, the type of social cohesion that should be beneficial to Côte d'Ivoire is trust between nationals and foreigners. The latter, and more precisely immigrants from bordering countries have played important contribution to the relative prosperity of the country. It is important that they are well integrated. It is of this integration that depends the stability of the country.

Further research is needed in order to reach a better understanding of all social impacts of Ivorian conflict. A more representative survey would be needed to encompass people opinions about the crisis and their proposals that allow reconciliation and social cohesion to thrive.

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Table 1: Associational Participation before and Two Year after the Conflict

	Before	After	<i>p-value*</i>
Overall participation	50.09	63.80	0.000
Mutuals	38.33	42.77	0.000
Professional associations	12.40	13.68	0.000
NGO	1.88	2.60	0.000
Sporting clubs	6.31	6.70	0.016
Youth groups	5.59	6.70	0.000
Neighborhood connections	11.24	14.55	0.000
Friends groups	6.58	8.14	0.000
Political associations	12.50	16.94	0.000

Note: *p-value* for Mc Nemar test.

Source: Author computation from 2004 ENSEA Survey Data

**Table 2: Distribution of Associational Participation and Trust by Demographic Groups**

Sample distribution	Associational participation		Trust	
	Percent belonging to association	<i>p-value</i>	Percent responding that « most people can be trusted »	<i>(p-value)</i>
<i>Overall sample</i>	63.8		20.2	
<i>Gender</i>				
Male	65.2	0.014	20.5	0.526
Female	58.5		19.1	
<i>Religion</i>				
Catholic	70.9	0.000	20.6	0.081
Protestant	63.1		23.7	
Muslim	51.3		20.1	
Other religion	61.0		13.0	
No religion	66.7		15.4	
<i>Highest educational attainment</i>				
No diploma	52.8	0.000	19.7	0.999
Primary school	58.6		20.1	
Secondary school	66.5		19.8	
Higher	70.5		19.7	
<i>Ethnic group</i>				
Akan	69.7	0.000	18.6	0.211
Krou	67.6		21.0	
Southern Mande	66.9		18.9	
Northern Mande	53.7		19.4	
Gur (Northern Voltaïque)	60.5		22.4	
Foreigners	35.6		28.0	

*Source: Author computation from 2004 ENSEA Survey Data*

**Table 3: Opinion about Trust Pattern**

<i>Sample distribution</i>	Degraded	Unchanged	Improved
<i>Total sample</i>	41.2	52.7	6.1
<i>Gender</i>			
Male	40.5	52.9	6.6
Female	43.5	51.9	4.6
<i>Highest educational attainment</i>			
No diploma	38.2	56.7	5.2
Primary school	37.4	57.6	5.0
Secondary school	42.5	51.4	6.0
Higher	43.8	49.9	6.3

*Source: Author computation from 2004 ENSEA Survey Data*

**Table 4: Bivariate Probit estimates of Associational Participation-trusting Model**

Variables	Associational participation	Trust	Marginal effects
Constant	-0.934* (-4.36)	-0.849* (-3.66)	-
<i>Gender</i>			
Female	-0.181* (-2.02)	-0.039 (-0.39)	-0.019 (-1.02)
<i>Household size</i>	0.029* (3.35)	-0.003 (-0.35)	0.001 (0.72)
<i>Age</i>			
Between 30 and 40	0.128 (1.37)	0.067 (0.63)	0.022 (0.98)
Between 41 and 55	0.295* (2.84)	0.127 (1.10)	0.045** (1.80)
56 and over	0.524* (3.58)	0.081 (0.51)	0.050 (1.27)
<i>Household in couple</i>	0.005 (0.06)	0.090 (1.02)	0.017 (0.99)
<i>Religion</i>			
Catholic	0.103 (1.01)	0.241* (2.09)	0.054* (2.20)
Protestant	-0.056 (-0.51)	0.335* (2.74)	0.063* (2.23)
Muslim	-0.109 (-0.81)	0.057	0.003 (0.10)

		(0.38)	
Other religion	-0.165 (-0.97)	-0.096 (-0.47)	-0.028 (-0.78)
<i>Highest educational attainment</i>			
Primary school	0.111 (0.99)	-0.073 (-0.59)	-0.007 (-0.27)
Secondary school	0.246* (2.49)	-0.095 (-0.89)	-0.002 (-0.08)
Higher level	0.316* (2.86)	-0.111 (-0.93)	-0.002 (-0.07)
<i>Ethnic group</i>			
Akans	0.684* (4.98)	-0.348* (-2.42)	-0.021 (-0.75)
Krous	0.610* (4.12)	-0.241 (-1.55)	-0.013 (-0.42)
Southern Mandés	0.620* (3.66)	-0.272 (-1.51)	-0.022 (-0.64)
Northern Mandés	0.452* (3.07)	-0.220 (-1.40)	-0.017(-0.57)
Gurs (Voltaïques)	0.559* (3.52)	-0.11 (- 0.66)	0.008 (0.22)
<i>Occupational status</i>	0.197** (1.90)	0.084 (0.72)	0.028 (1.33)
<i>Change in the occupational status after the conflict (yes/no)</i>	0.041 (0.39)	-0.065 (-0.55)	-0.009 (-0.41)
Correlation coefficient	0.127* (2.865)		
Log-likelihood	-2001.469		
Sample size	1805		

Note: Numbers in parenthesis are t-statistics. \* (\*\*) indicates a statistical significance at 5% (10%).

*Source: Author computation from 2004 ENSEA Survey Data*